

In the Claims:

1. (currently amended) A method for determining an ~~the~~ age of an object ~~such as a product containing volatile components~~, comprising: ~~the steps of~~

measuring a first strength of a first scent of said object with a first electronic sensor, ~~the~~ a decay rate (α_1) of said first scent being known;

measuring simultaneously a second strength of a second scent of said object with a second electronic sensor, ~~the~~ a decay rate (α_2) of said second scent being known

calculating a current scent ratio (σ) of said first and second ~~the two~~ scent strengths; and

determining said ~~the~~ age of said ~~the~~ object starting from a reference time for which a reference scent ratio (σ_0) of said scent strengths has been registered.

2. (currently amended) The method of claim 1, wherein ~~the~~ said determining step is performed by applying to said current scent ratio σ the following formula giving said ~~the~~ age t of said object as represented by the symbol t ~~the product~~:

$$t = (\alpha_1 - \alpha_2)^{-1} \cdot \ln \left(\frac{\sigma}{\sigma_0} \right),$$

where σ_0 designates said reference scent ratio, and α_1 and α_2 designate said first and second decay rates of said first and second scents respectively.

3. (currently amended) The method of claim 1, wherein said ~~the~~ determining step is performed by comparing said ~~the~~ current scent ratio (σ) to preregistered data corresponding to respective age values.

4. (currently amended) The method of claim 1, wherein said reference scent ratio (σ_0) is determined by measuring said ~~the respective~~ first and second scent strengths at an initial time from which said ~~the~~ age of said object ~~the product~~ is to be determined.

5. (currently amended) The method of claim 1, wherein said first and second decay rates (α_1, α_2) are determined during a process of characterizing ~~characterization step~~ of sensors measuring said first and second scents.

6. (currently amended) The method of claim 1, wherein said first and second scents are included in at least one volatile compound sprayed on said object ~~product~~.

7. (currently amended) The method of claim 6, wherein said reference scent ratio (σ_0) is preregistered and corresponds to said first and second ~~the~~ scent strengths when spraying said compound.

8. (currently amended) A method of determining a ~~the~~ freshness of goods from a reference time, ~~implementing the method according to claim 1~~ comprising:

measuring a first strength of a first scent of said goods with a first electronic sensor, a decay rate (α_1) of said first scent being known;

measuring simultaneously a second strength of a second scent of said goods with a second electronic sensor, a decay rate (α_2) of said second scent being known

calculating a current scent ratio (σ) of said first and second scent strengths; and

determining said freshness of said goods starting from a reference time for which a reference scent ratio (σ_0) of said scent strengths has been registered.

9. (currently amended) A method of marking an object with a volatile identification code, comprising: ~~the steps of~~

spraying a first volatile component ~~at least two volatile components~~ onto said ~~the~~ object; and

spraying a second volatile component onto said object, wherein characteristics of said first and second volatile components sprayed on said object define said volatile identification code

~~, said components being chosen for containing the respective first and second scents of the method according to claim 1.~~

10. (currently amended) A method of sealing an object ~~with a volatile component~~, comprising: ~~the steps of~~

introducing into an impermeable seal attached to said the object a first volatile component;

introducing into said impermeable seal a second volatile component;

simultaneously determining a first scent strength of said first volatile component and a second scent strength of said second volatile component at a time when said impermeable seal is unbroken; and

determining a reference scent ratio (σ_0) from said first scent strength and said second scent strength

~~at least two volatile components, said components being chosen for containing the respective first and second scents of the method according to claim 1, and said reference scent ratio (σ_0) corresponding to the scent strengths ratio when sealing.~~

11. (currently amended) The method of claim 10, further comprising:

simultaneously determining a first scent strength of said first volatile component and a second scent strength of said second volatile component at a second time that is subsequent to said time when said impermeable seal is unbroken; and

determining a current reference scent ratio (σ_0) from said first scent strength and said second scent strength that are determined at said second time, wherein said the seal is considered to have been broken if said current scent ratio (σ) differs from said reference scent ratio (σ_0) by more than an acceptable error ϵ .

12. (currently amended) A system for determining an the age of a product containing first volatile component and a second volatile component ~~components~~, comprising:

a first electronic sensor that generates a first signal in response to a first scent of said first volatile component;

a second electronic sensor that generates a second signal in response to a second scent of said second volatile component;

~~at least two electronic sensors respectively responsive to at least a first scent and a second scent;~~

a calculating unit for calculating a current scent ratio (σ) ~~of the respective~~ based on said first and second signals ~~signal strengths delivered by the two sensors~~, and for extracting said the age of said the object from a reference time for which a reference scent ratio (σ_0) ~~of the respective signal strength~~ is registered.